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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/511,509

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Mike Everton

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EXAMINER

GREGORIO, GUINEVER S

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/511,509	Applicant(s) EVERTON ET AL.	
	Examiner GUINEVER S. GREGORIO	Art Unit 4162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 21-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :01/18/2005; 01/18/2005; 01/24/2005.

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Group I, claims 1-20 in the reply filed on August 14, 2008 is acknowledged. The traversal is on the ground(s) that unity exists between the groups. This is not found persuasive because claim 1, which is generic to all of the invention does not contain a special technical feature which constitutes an inventive step over prior art. The prior art cited by examiner is given as proof that the claim does not contain an inventive step.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4-9, 12, 13, and 17-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 4, 6, 7, 8, 9, 12, 18, 18, and 20, the phrase "preferably" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Regarding claims 4, 5, and 13 the phrase "oil-like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

Regarding claim 17, the phrase "and the like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

Claim 5 recites the limitation "unwanted component" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Freymeyer et al. (U.S. Patent No. 5,223,152). Freymeyer et al. teaches a method for recovering valuable products from the waste streams generated as a result of refining of petroleum (column 1, lines 13-20). Freymeyer et al. teaches the standard practice in the oil refining industry is to collect and send refinery waste steams to an API separator for initial processing (column 1, lines 24-26). At the API separator gravity separates the refinery wastes into three layers, a primarily solids or sludge layer at the bottom, a primarily-water layer in the middle and a primarily oil layer at the top. The primarily oil layer is skimmed from the top of the API separator and collected into a large surge tank for eventual reprocessing to recover valuable products which corresponds to partial

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dewatering prior to first treatment (column 1, lines 29-31). Freymeyer et al. teaches a process comprising the steps of introducing the oil stream into a blowdown drum at a temperature above the dewpoint temperature of the water in the drum and feeding a bottom stream from the blowdown drum to a fractionator for separation into product streams (column 2, lines 57-68). The blowdown drum corresponds to the first treatment stage to remove a relatively more volatile component from the waste material. The purpose of the blowdown drum is to remove water through vaporization or evaporation of water (column 6, lines 4-10). Freymeyer et al. teaches steam and light hydrocarbon is carried up the blowdown drum where it is refluxed which corresponds to one portion of the separated material during the first treatment stage (column 6, lines 57-60). Freymeyer et al. teaches the hydrocarbon liquid fed to the blowdown drum falls out of the bottom of the blowdown drum and is fed to the coke fractionator which corresponds to the partially refined portion sent to a second treatment stage (column 7, lines 1-3). The other portion is sent to a fractionator for separation of products.

Regarding claims 4 and 5, Freymeyer et al. teaches hydrocarbons which corresponds to fats, oils or grease (column 7 lines 16-22). Furthermore Freymeyer et al. teaches removal of water (column 6, lines 60-68).

Regarding claim 6, Freymeyer et al. teaches the recovered oil or slop oil from the API separator is typically composed of 80 to 90 weight percent oil (column 1, lines 32-34).

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Regarding claim 7, Freymeyer et al. teaches some entrained solids such as green waxes and coke fines may be present in the oil but at very low levels which corresponds to suspended solids up to about 5% (column 1, lines 35-37).

Regarding claim 8, Freymeyer et al. teaches the remainder of the recovered oil is water meaning 10-20 percent of the recovered oil is water and therefore corresponds with up to 50% of waste material is water (column 1, lines 32-35).

Regarding claims 13, 15, and 16, Freymeyer et al. teaches waste streams from oil refinery process are collected and purified to recover valuable products such as light hydrocarbons which corresponds to oil or oil-like material suitable for use as engine fuels (column 1, lines 12-23; column 7, lines 16-22).

Regarding claim 14, Freymeyer et al. teaches the primarily oil layer is skimmed from the top of the API separator and collected into a large surge tank for eventual reprocessing to recover valuable products which corresponds to partial dewatering prior to first treatment (column 1, lines 29-31).

Regarding claim 17, Freymeyer et al. teaches oil refining process which corresponds to manufacturing process (abstract).

Regarding claims 18-19, Freymeyer et al. teaches returning oil to the blowdown drum which corresponds to a secondary separation stage to further remove water (column 6, lines 64-66).

Regarding claim 20, Freymeyer et al. teaches feeding the steam from the blowdown drum into the bottom of the blowdown drum to provide sufficient steam to heat the bottom of the blowdown drum which corresponds as a method of returning a

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portion of the water vapor to the process in order to conserve energy (column 6, lines 34-39).

Claims 1-3, 4-5, 9-17, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Clarke et al. (WIPO Pub. No. WO 00/18483). Clarke et al. teaches a cyclonic evaporator to separate two or more components in a waste stream from an industrial source (page 1, lines 9-23). Clarke et al. teaches two stages in the cyclonic evaporator, a hydrocyclone stage and an evaporator stage (page 1, lines 21-23). Clarke et al. teaches imparting a movement which Clarke et al. defines as swirling, rotating, spiraling, or helical flow to a feed material in order to enhance the vaporization of one component (page 4, lines 21-26; page 8, lines 9-12). Clarke et al. teaches flash vaporization of the more volatile waste material and then continued evaporation of the volatile component in the second stage (page 5, lines 19-24). The first stage described by Clarke et al. corresponds to partial refinement of waste material into two components volatile and nonvolatile. The evaporation stage, the second stage, described by Clarke et al. corresponds to a second treatment stage to further refine the partially refined portion onto at least two further portions. Furthermore, Clarke et al. teaches using a feed material containing alcohol such as methanol, ethanol, and propanol which are oil-like combustible liquids and that can be used as fuel for engines (page 5, lines 1-4). Furthermore Clarke et al. teaches the feed material is alcohol containing aqueous waste material which corresponds to separating water from the useful product, alcohol (page 5, lines 2-4).

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Regarding claim 17, Clarke et al. teaches waste stream from industrial or chemical process which corresponds to manufacturing process (page 1, lines 9-10)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GUINEVER S. GREGORIO whose telephone number is (571)270-5827. The examiner can normally be reached on Monday-Thursday, 10:30-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on 571-272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gsg

/Jennifer McNeil/
Supervisory Patent Examiner, Art Unit 4162